



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D5957**

**Job Sheet 173835**



Part No: D5957

Job Qty: 15 ea

Part Name: Saddle



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 3/7/18

Job Tracking No:

Due Date: 4/12/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV B IPP Rev:E Re-Format 05-11-29 JLM IPP Rev:F ecn826 06.12.06 ec

Ship Via:

### Bill of Materials

### Job Routing

| Op No | Operation              | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off     |
|-------|------------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|--------------|
|       |                        |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |              |
| 90    | Start up Operation     | 6 Ea  |            | 4/11/18  | 0.00      | 0.00    | Start Up Machining-4  |           | SBL 18/03/27 |
| 100   | CNC Vertical Machining | 6 pcs |            | 4/11/18  | 3.66      | 16.22   | HAAS1-5               |           | SBL 18/03/27 |
| 110   | QC                     | 6 pcs |            | 4/11/18  | 0.00      | 0.00    | QC1                   |           | SBL 18/03/27 |
| 120   | QC                     | 6 pcs |            | 4/11/18  | 0.00      | 0.00    | QC8 Machining-4       |           | SBL 18-03-27 |
| 130   | HandFinish             | 6 pcs |            | 4/11/18  | 0.00      | 0.36    | HandFinish1           |           | SBL 18-03-27 |
| 140   | Powdercoat             | 6 pcs |            | 4/12/18  | 0.00      | 0.29    | Powdercoat1           |           | SBL 18-03-27 |
| 150   | QC                     | 6 pcs |            | 4/12/18  | 0.00      | 0.00    | QC3                   |           | SBL 18-03-27 |
| 160   | Packaging              | 6 pcs |            | 4/12/18  | 0.00      | 0.00    | Packaging3-2          |           | SBL 18-03-27 |
| 170   | QC21-SA                | 6 Ea  |            | 4/12/18  | 0.00      | 0.00    | QC21                  |           | SBL 18-03-27 |

Part Op 100 - 1-Machine as per folio D5957, Ensure Batch Number is entered  
Descriptions: 110 - Inspect on CMM as per folio CMM016.

140 - START TIME: 10:45

O.V.T. 300° FINISH 11:05

M18760

### Job BOM

| Part / Item | Component Name | Quantity    | Operation             | Container |
|-------------|----------------|-------------|-----------------------|-----------|
| D6101-007   | Saddle Billet  | 6 Ea (1 ea) | 90-Start up Operation |           |

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated |
|-----------------------|----------------|----------|-----------|-----------|
| 90-Start up Operation | D6101-007      | 6        | 11        | 0         |

### Part Specifications

Specifications could not be found.

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                              |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |  |                                              |  |
| Date : _____                                                 | Step #: _____                                                                                                                                                                      | QTY Effective : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | MRB (QS1042) Approval                        |  |
| Description Work Order Deviation                             |                                                                                                                                                                                    | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  | Completed By                                 |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Lead hand / Supervisor Approval Verification |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | QC / QA Coordinator Approval                 |  |
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |                                              |  |

  

|                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>FAULT CATEGORY</b>                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Identification <input type="checkbox"/><br>Setup <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Inspection for Testing <input type="checkbox"/><br>Poor Information <input type="checkbox"/><br>Rushing <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Past Due <input type="checkbox"/> | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Wave/Twist in Tube<br><input type="checkbox"/> Marks/Chatter | <input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Drill Holes | <input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Fit/Function<br><input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Turning Sequence |
| OTHER : _____                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                   |

Insurance\approved QA/NCRWO Rev I

DART Aerospace Ltd.  
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 Hawkesbury, ON K6A 1K7  
 CANADA  
 TEL.: 1 813 632-5200  
 Email: sales@dartaero.com  
 www.dartaerospace.com

Container No: S054705

Part: D5957

Job No: 173835

Serial No/Batch: S054705

Revision:

Inspector:



# STATION ICE DART

06 11.28

| REV | DATE     | DESCRIPTION                                                                                                                      |
|-----|----------|----------------------------------------------------------------------------------------------------------------------------------|
| A   | 97.05.06 | NEW ISSUE                                                                                                                        |
| B   | 06.11.07 | INCORPORATE DEO 9102, DEO 9079;<br>ADD 0.363 DIMENSION; $\phi$ 0.316 WAS $\phi$ 0.313;<br>ADD TOLERANCE TO R2.000; ADD 0.363 DIM |

R0.250

R1.625

- R1.875

**DETAIL B**  
**SCALE 1:1**

R0.500  
 $\phi 0.316$   
 (8 PLACES)

DRILL  $\phi 0.316$  THRU  
 $\phi 0.750$  SPOT FACE  
(2 PLACES)

Ø 0.920 SPOT FACE  
(2 PLACES)

-R0.500

**VIEW A-A**

## D5957 INNER AFT SADDLE

NOTES:

- B**

**ISOMETRIC VIEW**  
SCALE 1:8

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|                                      |               |                           |
|--------------------------------------|---------------|---------------------------|
| <b>DART AEROSPACE LTD</b>            |               | <b>Work Order:</b> 173835 |
| <b>Description:</b> Inner Aft Saddle |               | <b>Part Number:</b> D5957 |
| <b>Inspection Dwg:</b> D5957         | <b>Rev:</b> B | <b>Page 1 of 1</b>        |

Inspect dimensions highlighted on inspection sheet drawing and record below:

| Dim           | Min   | Max   | Go/No Go Gauge | Recorded Actual Dimensions |       |       |       | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
|               |       |       |                | 1                          | 2     | 3     | 4     |    |      |
| A             | 0.438 | 0.443 |                | 0.438                      | 0.438 | 0.438 | 0.438 |    |      |
| B             | 1.745 | 1.755 |                | 1.750                      | 1.750 | 1.750 | 1.750 |    |      |
| C             | 5.245 | 5.255 |                | 5.25                       | 5.250 | 5.250 | 5.250 |    |      |
| D             | 6.995 | 7.005 |                | 6.998                      | 7.000 | 6.999 | 7.000 |    |      |
| E             | 5.240 | 5.260 |                | 5.250                      | 2.250 | 2.250 | 2.250 |    |      |
| F             | 4.745 | 4.755 |                | 4.745                      | 4.750 | 4.750 | 4.750 |    |      |
| G             | 0.315 | 0.322 |                | 0.316                      | 0.316 | 0.316 | 0.316 |    |      |
| H             | 1.522 | 1.532 |                | 1.528                      | 1.529 | 1.528 | 1.527 |    |      |
| I             | 3.048 | 3.058 |                | 3.054                      | 3.056 | 3.054 | 3.055 |    |      |
| J             | 4.575 | 4.585 |                | 4.580                      | 4.580 | 4.580 | 4.580 |    |      |
| K             | 0.315 | 0.322 |                | 0.316                      | 0.316 | 0.316 | 0.316 |    |      |
| L             | 0.495 | 0.505 |                | 0.500                      | 0.500 | 0.500 | 0.500 |    |      |
| M             | 0.490 | 0.510 |                | 0.500                      | 0.500 | 0.494 | 0.494 |    |      |
| N             | 1.865 | 1.885 |                | 1.875                      | 1.875 | 1.875 | 1.875 |    |      |
| O             | 7.990 | 8.010 |                | 7.999                      | 8.000 | 8.000 | 8.001 |    |      |
| P             | 2.240 | 2.260 |                | 2.250                      | 2.250 | 2.250 | 2.250 |    |      |
| Q             | 0.308 | 0.313 |                | 0.310                      | 0.311 | 0.310 | 0.311 |    |      |
| R             | 0.760 | 0.765 |                |                            | 0.760 | 0.760 | 0.760 |    |      |
| S             | 0.490 | 0.510 |                |                            | 0.500 | 0.500 | 0.501 |    |      |
| T             | 1.625 | 1.645 |                |                            | 1.625 | 1.625 | 1.625 |    |      |
| U             | 2.000 | 2.020 |                |                            | 2.000 | 2.000 | 2.000 |    |      |
| V             | 0.023 | 0.043 |                |                            | 0.033 | 0.033 | 0.033 |    |      |
| W             |       |       |                |                            |       |       |       |    |      |
| X             |       |       |                |                            |       |       |       |    |      |
| Y             |       |       |                |                            |       |       |       |    |      |
| Z             |       |       |                |                            |       |       |       |    |      |
| AA            |       |       |                |                            |       |       |       |    |      |
| AB            |       |       |                |                            |       |       |       |    |      |
| AC            |       |       |                |                            |       |       |       |    |      |
| AD            |       |       |                |                            |       |       |       |    |      |
| AE            |       |       |                |                            |       |       |       |    |      |
| AF            |       |       |                |                            |       |       |       |    |      |
| Accept/Reject |       |       |                |                            |       |       |       |    |      |

|                        |                 |
|------------------------|-----------------|
| Measured by: SBC / JMK | Audited by: h.e |
| Date: 18/03/27         | Date: 18-03-27  |

| Rev | Date     | Change                                                 | Revised by | Approved |
|-----|----------|--------------------------------------------------------|------------|----------|
| A   | 99.04.19 | New Issue                                              | RF         |          |
| B   | 02.12.13 | Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B | KJ/RF      |          |
| C   | 06.11.20 | Added dimension V                                      | KJ/JLM     |          |
| D   | 06.12.06 | Dimensions L,N,P revised                               | KJ/EC      |          |
| E   | 07.06.15 | Dimension G revised                                    | KJ/JLM     |          |
| F   | 08.04.21 | Dimension E revised                                    | KJ/DD      |          |
| G   | 08.09.05 | Dimension K revised                                    | KJ/DD      |          |
| H   | 09.07.29 | Dimension Q revised                                    | KJ         |          |



|                                      |  |                           |  |
|--------------------------------------|--|---------------------------|--|
| <b>DART AEROSPACE LTD</b>            |  | <b>Work Order:</b> 173835 |  |
| <b>Description:</b> Inner Aft Saddle |  | <b>Part Number:</b> D5957 |  |
| <b>Inspection Dwg:</b> D5957         |  | <b>Rev:</b> B             |  |
|                                      |  | <b>Page 1 of 1</b>        |  |

Inspect dimensions highlighted on inspection sheet drawing and record below:

| Dim           | Min   | Max   | Go/No Go Gauge | Recorded Actual Dimensions |       |   |   | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|---|---|----|------|
|               |       |       |                | 5 *                        | 6 *   | 3 | 4 |    |      |
| A             | 0.438 | 0.443 |                | .438                       | .438  |   |   |    |      |
| B             | 1.745 | 1.755 |                | 1.750                      | 1.750 |   |   |    |      |
| C             | 5.245 | 5.255 |                | 5.250                      | 5.250 |   |   |    |      |
| D             | 6.995 | 7.005 |                | 7.000                      | 7.000 |   |   |    |      |
| E             | 5.240 | 5.260 |                | 5.250                      | 5.250 |   |   |    |      |
| F             | 4.745 | 4.755 |                | 4.750                      | 4.750 |   |   |    |      |
| G             | 0.315 | 0.322 |                | .316                       | .316  |   |   |    |      |
| H             | 1.522 | 1.532 |                | 1.526                      | 1.527 |   |   |    |      |
| I             | 3.048 | 3.058 |                | 3.053                      | 3.053 |   |   |    |      |
| J             | 4.575 | 4.585 |                | 4.580                      | 4.580 |   |   |    |      |
| K             | 0.315 | 0.322 |                | .316                       | .316  |   |   |    |      |
| L             | 0.495 | 0.505 |                | .500                       | .500  |   |   |    |      |
| M             | 0.490 | 0.510 |                | .500                       | .500  |   |   |    |      |
| N             | 1.865 | 1.885 |                | 1.875                      | 1.875 |   |   |    |      |
| O             | 7.990 | 8.010 |                | 8.000                      | 8.000 |   |   |    |      |
| P             | 2.240 | 2.260 |                | 2.250                      | 2.250 |   |   |    |      |
| Q             | 0.308 | 0.313 |                | .310                       | .310  |   |   |    |      |
| R             | 0.760 | 0.765 |                | .760                       | .760  |   |   |    |      |
| S             | 0.490 | 0.510 |                | .500                       | .500  |   |   |    |      |
| T             | 1.625 | 1.645 |                | 1.625                      | 1.625 |   |   |    |      |
| U             | 2.000 | 2.020 |                | 2.000                      | 2.000 |   |   |    |      |
| V             | 0.023 | 0.043 |                | .033                       | .033  |   |   |    |      |
| W             |       |       |                |                            |       |   |   |    |      |
| X             |       |       |                |                            |       |   |   |    |      |
| Y             |       |       |                |                            |       |   |   |    |      |
| Z             |       |       |                |                            |       |   |   |    |      |
| AA            |       |       |                |                            |       |   |   |    |      |
| AB            |       |       |                |                            |       |   |   |    |      |
| AC            |       |       |                |                            |       |   |   |    |      |
| AD            |       |       |                |                            |       |   |   |    |      |
| AE            |       |       |                |                            |       |   |   |    |      |
| AF            |       |       |                |                            |       |   |   |    |      |
| Accept/Reject |       |       |                |                            |       |   |   |    |      |

|                         |                        |
|-------------------------|------------------------|
| Measured by: <u>SBZ</u> | Audited by: <u>h.a</u> |
| Date: <u>18/03/27</u>   | Date: <u>18-03-27</u>  |

| Rev | Date     | Change                                                 | Revised by | Approved |
|-----|----------|--------------------------------------------------------|------------|----------|
| A   | 99.04.19 | New Issue                                              | RF         |          |
| B   | 02.12.13 | Reformat; Added Dim. T-U & DT8682, DT8686 & DT8696 A/B | KJ/RF      |          |
| C   | 06.11.20 | Added dimension V                                      | KJ/JLM     |          |
| D   | 06.12.06 | Dimensions L,N,P revised                               | KJ/EC      |          |
| E   | 07.06.15 | Dimension G revised                                    | KJ/JLM     |          |
| F   | 08.04.21 | Dimension E revised                                    | KJ/DD      |          |
| G   | 08.09.05 | Dimension K revised                                    | KJ/DD      |          |
| H   | 09.07.29 | Dimension Q revised                                    | KJ         |          |